

Chapter 12 : Systems Analysis and Design

Phase 1: Preliminary Investigation

- Determines the need for a new information system
- Problem -> Alternatives -> Report -> **Analysis**

Phase 2: Systems Analysis

- Data about the present system is collected and then analyzed to determine the new requirements
- How to analyze data :
 - By using checklists, top-down analysis method, Grid charts, etc.
- Gather -> Analyze -> Report -> **Design**

Phase 3: Systems Design

- Defines the alternatives, selects the best system, and writes a systems design report
- Evaluate systems according to :
 - economic feasibility, technical feasibility, and operational feasibility
- Alternatives -> Best -> Report -> **Development**

Phase 4: Systems Development

- In this phase, we acquire the software and hardware, and test the new system
- Software -> Hardware -> Test -> **Implementation**

Phase 5: Systems Implementation

- Converting from the old system to the new system
- Training people to use the new system
- Types of systems implementation (conversion) approaches include:
 - Direct, Parallel, Pilot, Phased
- Conversion type -> Train -> **Maintenance**

Phase 6: Systems Maintenance

- Systems maintenance is a very important, ongoing activity that includes a systems audit and a periodic evaluation
- Systems audit -> Periodic evaluation -> **Investigation**